



SEQUENCE LISTING

<110> Hekimi, et al

<120> C. Elegans GRO-1 Gene

<130> 11202-004-999

<140> 09/513,151

<141> 2000-02-25

<150> CA 2,210,251

<151> 1997-08-25

<150> PCT/CA98/00803

<151> 1998-08-20

<160> 77

<170> PatentIn version 3.2

<210> 1

<211> 14458

<212> DNA

<213> C. elegans

<400> 1

gcaaaatttg ctaagatgaa gcgccggctt gttacattgc ttttcagagt cgattgggttc 60
aaaattgtca attttatcca aaatagagtg cattgtgtgt acaataacta aagaatcatc 120
catatctggt ccaacacaac attgatggaa tactggatca attgtctaaa aaaatatcaa 180
tagaataatg aaacattttc agaattcatt accgtcaatg tcagatagtc attccttgag 240
tattttgtgg atgctttgaa aattcttcgc tgggccatat ctgttgata atctgaaaaa 300
cgcaataaat ttcacgaaa atgcctatta aattgaatta ccttcttctt catcatttcc 360
taacaattca tgctcttttt gtgcttgact tgtgaccaat tctttaaatt caattaaatc 420
gtcaatatcc ttttgtacta aatccatctt gatattcaat atatctttgt cagtatagta 480
ttcagcgtat ctgaaatttc gaatttatct ttctaattcc caagaaaaat aattaataag 540
aataccttaa cgaattatta tccaatatat catcatttgc cacatctgga agacgctgag 600
gaactgtttg agcagcttgg aggtagtcgt catcgtctct ggaaattggt attttcaatt 660
tcaaaaaaaaa aactttactt acgaaatata ctcatctgat gcaatccacg gatcaaaacg 720
acgtctttgc atctttgaat cattttccgc atggcacgc atcacttctt tottatgatt 780
attttctaac gtttttgaaa attcgacgtg ctcttcacaa cggccgccat gtttcgcaag 840
ttcttctttt gatcgtatct aaaattttta atttgaaaaa aagcttacta tcaaattttc 900
gtattttttc tcacctgctt acaccgaaca agcgttcgat acgaagcata attacattgt 960
ccatacttat ttttgtcgta ttcattggca acaagacgga atcgtgttcc aggtgcaact 1020

atatattgag	caggaggacg	agttgtttgt	ttcatgctgc	ttaaaaataa	aatggaaaa	1080
ttgagtcaaa	aagttgagat	aaaacaaatt	aaaacaattt	tctgaaaaat	aaacaactga	1140
aatttgaagt	aataaacaac	acgcgaaaac	gttatttcgg	agcatcgttt	gagaagtaaa	1200
actttttttc	ggcgcaccct	tgtgcgcagt	ttttatcttc	tcttttaatt	taattttcaa	1260
gctaaatctt	tcttttttaa	ctttgaataa	atatttaa	attcagaatg	caccaataaa	1320
cctggaacaa	aatcgataat	gttccgcaag	cttggttctt	ctgggtcact	atggaagccg	1380
aaaaatccgc	attcttttga	atacctcaaa	tatttacaag	gagtgcac	aaaaaatgag	1440
aaagttacgg	aaaacaataa	gaaaatatta	gtagaagcat	tacgagctat	cgcagaaatt	1500
ctcatttggg	gcgatcagaa	tgatgcttcg	gtttttgagt	gagttttttt	ccaatgtttt	1560
ttttcaaatac	tgatgttgaa	tttcagtttc	ttccttgagc	ggcaa	aatgct tctttatttc	1620
ttgaaaatta	tggaacaagg	aaacacacca	ctaaatgtac	aattactgca	gactttgaac	1680
attttattcg	aaaatattcg	acatgaaact	tcactttgta	agttttttat	atggattttc	1740
gcttaaaatt	gccagttttc	agatttcctt	ctaagtaaca	atcatgtaaa	ctcgattatt	1800
tcccacaaat	tcgatttaca	aaatgatgag	atcatggctt	actacattag	ttttctgaaa	1860
actctttcat	ttaaactgaa	tccagctaca	atccacttct	tcttcaatga	aacgactgaa	1920
gaatttccat	tgttggtaga	agttttgaag	ctttataatt	ggaatgaatc	aatggttcga	1980
attgctgtta	gaaatattct	tttaa	atatt tttgtgagagttc	aagatgattc	aatgattatt	2040
ttcgctatca	agcatacaaa	agttagtaga	aaattatttt	gaaaaggtgt	atttaagcaa	2100
taaatattac	aggaatatct	atcggagtta	atagattctc	tagttggtct	ctcacttgaa	2160
atggacacat	ttgtacgatc	tgctgagaat	gtgttagcta	atcgagagag	attacgagga	2220
aaagtggatg	atttaattga	tttgattcat	tatattggtg	aactattgga	tgtggaagct	2280
gtcgccgaaa	gtttatcaat	tttaggtcag	ttttactgct	ggaaaatcaa	gtttttaatg	2340
ttaaattttc	agtaacaaca	cgatacttaa	gccctctatt	actttcaagt	atatcaccaa	2400
gaagagataa	tcattcactt	ctactcactc	cgatttctgc	gttatttttt	ttctctgaat	2460
ttttattggt	gagttttaac	atttaaaatt	acatttttct	aatttattta	tttttcagat	2520
agttcgtcac	catgaaacaa	tatatacatt	tttatcatct	ttcctatttg	acactcagaa	2580
tactttgacg	accattgga	tacgtcataa	tgagaaat	atgcttagaac	cgattacatt	2640
atcatcacca	accggagaat	atgtgaatga	agaccagtaa	gagctgaaat	tttaaaattt	2700
ttgctttgaa	tatagtattt	tcagcgtatt	tttcgatttt	ctactggaag	catttgattc	2760
cagtcaagca	gacgattcga	aggcattcta	tggattaatg	ctgatttatt	caatgtttca	2820
gaataatggt	gagtttttaa	aaattgattt	gttaaat	aaatttccatt	tccaataact	2880

cctcttcaga cagtaagttt tcaatgttgt aaagttcctg ttcattctgtg atcgttttct 2940
tcattttttt agttttgcat gaacagtttt caaatttttt tgatatcata cagtaaatat 3000
cgatcatccag ataattttct atttaaaaaa aatgaataaa aagagggcgc gcagaaattg 3060
ccgaagtaat gttaaattta agggacacat gcgtagcttg ttgtgtgggt ctgcgcgcgc 3120
tttgtttgat ttatcttggt ttctgctcaa agagctgttt ttatttttagc gttgaatgct 3180
tttttaccgt tctcatcggc tttttaatag gaatatttaa aaaaaaagg ttaataaatc 3240
ttcgttttta caaaatccat ctaagatttg catttggtga gctcaacaag taaagtttta 3300
agtaacattg ttttttaaaa aacaattgaa ccaaattttg ccgaaacatt aataacatga 3360
cgatactcta taaaatatct ctcttttcaa aataaatttt caaaaaaat ccatttttca 3420
gccgatgttg gagaacttct atctgctgcc aacttcccag tgctcaaaga atcaacgaca 3480
acttcattag ctcaacagaa tcttgctcgt ctccgaatag catctacgtc ttccatatca 3540
aagcgaacga gagctatcac tgaaattgga gtagaagcga ccgaggaaga tgagattttt 3600
catgatgttc ctgaagaaca aacgttggtg agtaaataaa tcaacattga ttgttacaca 3660
aactttaata tttttaaaatt tgaaaatttt cttcaaagt ctcaaaaatc ctgtcgaaaa 3720
ttacaggaag atctgggtga tgatgtattg gttgatactg aaaattcagc aataagtgat 3780
ccagaagtga gtagaaaacg tgcattgatt aattattaaa aaaaaaatat agttttcccc 3840
agttttcctt gacctaaaac tcagcaattt cagcctaaaa acgtggagtc agaattctgt 3900
tctcgatttc aatctgctgt tgatgagctt ccacctcgt cgacttctgg atgtgatgg 3960
cgactttttg atgcactttc atcgattatc aaagcagttg gaacagatga caatcgaatt 4020
cgaccaatta cattggaact tgcattgtct gtaattcggc aaattttaat gactgttgat 4080
gatgaaaaag taagattaca aattcaaaat tgagcaaaat cagaatctaa atttcataaa 4140
ttgttcaggt acataccagt ttaacgaaat tatgcttcga agttcgtcta aaacttttat 4200
catcaattgg acaatatgtt aatggagaga atctgttttt ggagtgggtt gaggatgaat 4260
atgcagaatt tgaagtaagc caagaggtcc gaaaataatt taattcatcc tttttattca 4320
ggtgaatcac gtgaatttcg atataatcgg tcacgaaatg cttcttcctc cagctgcaac 4380
tcctctttcg aatctgtctac ttcataagcg attgccagtg ggatttgaag aacgaataag 4440
aactgtagga aactttttta atttgaaaat taattatata tatatttgca gcaaactgta 4500
ttctacctac atattcgaaa attggaacga gatttgaccg gtgaaggaga cacagaatta 4560
cctgtgagag tgttgaattc tgatcaggaa ccagttgcca tcggtgattg tattaattta 4620
cgtgagttca tctgcataga aaacaccata tttctactca aattaacaat tttcagataa 4680

ttcggatctt	ctatcctgca	ctgtggttcc	tcaacaacta	tgttctcttg	gaaaacctgg	4740
tgatcgtctt	gctcgattcc	ttgtcactga	tagacttcaa	ttaattcttg	tcgaaccgga	4800
ttctcgaaaa	gccggatggg	caattgttcg	attcgtagga	cttcttcaag	atacaacaat	4860
taatggagat	tctacggatt	cgaaagtttt	gcatgttgtg	gtggaagggc	aaccctcgag	4920
aattaaggta	agaatactaa	cgggaaaaaa	aatcaaaaa	attacttctg	tttcagaaaa	4980
gacatccggt	tttaactgca	aagttcatat	tcgatgatca	cattcggtgt	atggcagcaa	5040
agcaacggct	caccaaggta	acggaaaaaa	taaccaaaaa	gacggaaagt	tattgtaaat	5100
ggacgaaatc	ggcgaaatta	attgaaaacg	tttgaatttg	ccgctaaaac	caaacgaaaa	5160
ccaaacgaaa	gcgaaattta	actatccctt	caggtagaat	atacatttta	tttctcttta	5220
tagggctgcc	aaacagcacg	tggctctgaa	cttcaggcga	tatgttcagc	tcttggagtt	5280
ccacgtatcg	atccagcgac	aatgacgtca	tcaccacgaa	tgaatccatt	cagaattgtg	5340
aaaggatgcg	caccgggaag	tgtacgaaaa	actgtttcca	catcatcatc	gtcaagccaa	5400
ggacgtcccg	gacattattc	tgcaaatctt	agatcagcat	ctagaaatgc	aggaatgata	5460
ccagatgata	caactcaacc	gagtagttct	tcggaaagaa	gaccttaggg	atcaatatct	5520
cttcagtttc	atcattttat	gctgtaaatt	gtatttaagt	attcctattc	tttgtagtac	5580
tgtattttaca	catcgtctag	ttaaaatcac	aatctccga	aaaaacaaac	cagtgaacat	5640
gtgatatttc	tcttgcccat	agttctcttt	tttttttgaa	acaaaaacaa	ttacttttat	5700
gctcacctat	tcgagccata	tttttttccc	aattaccggt	tgtttatttt	aatttctttt	5760
ttttttctgt	aaatctactt	tatttttaaa	actgcatttg	agattgtgta	tattttttca	5820
aaatggttca	aatgccgaat	ctatctactt	tttaatcatt	attcaaacag	aaaaaccgat	5880
tattttattca	gattctcaaa	aatggctgaa	aaagctgaaa	atcttccatc	ttcttcggcc	5940
gaagcttcag	aagagccatc	acctcaaact	ggaccaaata	tgaatcaaaa	accatcgatt	6000
ttgggtctctg	gaatggctgg	ttctggaaaa	acgacatttg	ttcaggtaac	tttcattcaa	6060
ttttgagagt	tttcaaacat	tactattttc	agcgtctcac	agcattccta	catgctcgta	6120
aaacacctcc	atatgtgatt	aatctggatc	cggcagttag	caaagtacct	tatccagtga	6180
atgttgacat	tcgagatact	gtgaaataca	aggaagttat	gaaagaattc	ggaatgggac	6240
caaataggagc	aattatgaca	tgtcttaacc	tgatgtgtac	tcgttttgat	aaagtaattg	6300
agttgattaa	taagagatct	tctgatttct	cagtttgtct	tcttgatact	cctggacaaa	6360
ttgaagcatt	cacttggagt	gctagtggat	ctattatcac	tgattcattg	gcaagtagcc	6420
atcccacggt	aagggttttt	gatttatgaa	atctgcttga	aatgaaaaaa	gattctaata	6480
aatttttgac	ttttaaacat	tttttacagt	tatatttggt	ctattttcta	tcattaaaag	6540

caaaatgaaa	agtcgattct	actccatatt	tattaatttc	gacttttcag	gtggtaatgt	6600
acattgtgga	ttccgctcgt	gccacaaatc	caactacatt	catgtccaat	atgctctacg	6660
catgttccat	tctctaccgt	accaaacttc	cattcattgt	cgttttcaac	aaagctgata	6720
ttgtcaaacc	aacatttgca	ctcaaatgga	tgcaagattt	cgaaagattt	gatgaagctt	6780
tagaggatgc	cagaagcagt	tatatgaatg	atttgagtcg	ttcattgagt	ctcgttcttg	6840
atgaattcta	ttgcggactg	aaaacagggt	tttattcgaa	ataaaacctt	ttttaaataa	6900
taaatttcag	tttgcgtcag	ttctgcaact	ggagaaggat	tcgaagatgt	aatgacagca	6960
atcgatgaaa	gtgttggaagc	atacaaaaaa	gaatatgttc	caatgtatga	aaaagtgttg	7020
gctgagaaaa	aactattgga	tgaggaggag	agaaagaaaa	gagatgaaga	ggtaattgta	7080
gtaatttaat	tctgattatc	ttcaaatttt	cagactctga	aaggaaaagc	tgttcacgac	7140
ctgaacaaag	tcgccaatcc	cgacgaattt	ctggagtcgg	agttgaattc	aaaaatcgat	7200
agaattcatt	tgggcggagt	cgatgaagag	aatgaggagg	atgctgaact	cgaaagatcc	7260
tgattttctt	tttgtttttg	aattttttatt	ctattttgat	ccctgtttac	ttcttattgt	7320
tctcattttg	ttgcgttggt	ttacatttta	ctcatttttg	cataaacttg	ttgcaaaaat	7380
caatataatt	tttgatctgg	aaatggtttt	aaaccttaac	ctttcatata	ttaataattt	7440
tttttcaaaa	aaacgttcta	aaaaggttcc	tcattttttc	aatataggaa	attttgaaga	7500
tctttttcaa	aaatgagggt	cttcgcttga	aaagccaaca	tttaaaacct	ttttttttcc	7560
agaaacctag	tggttaatgt	ctgaaaagac	gttcacaag	gcacagacca	tccgtgcaaa	7620
ggcatccgga	gtgccttcaa	tcgtcgaagc	tgtacagttt	catggagttc	gcatcacaaa	7680
aaacgatgct	ttggttaagg	aggtactacc	caaatttcaa	aatgttgcac	aattcaattg	7740
aaaatataaa	ttgtgaatta	aattcaactt	acatgttttt	tcaggtttcc	gaattataca	7800
gaagtaaaaa	tctagatgaa	cttgttcata	actctcatct	ggcggctcgt	catcttcaag	7860
aagttggatt	aatggataat	gcagttgctc	taattgatac	atctccaagc	tcaaatgaag	7920
gatatgttgt	caatttccta	gttcgagaac	caaaatcatt	cactgctgga	gtcaaagcag	7980
gagtttcaac	gaatggagat	gcggatgtca	gtttaaatgc	cggaaaacaa	agtgttggag	8040
gacgaggaga	ggcaatcaat	acacagtata	catatactgt	aaaggtaagg	acgagagtgt	8100
gcactgccag	tttggcatgt	tctcccaata	ttttttaatt	ataaaatttg	gaagtataaa	8160
aaaatgtttg	cttcatctaa	aaatagcctt	tttcacatga	aaaaaattga	aaaaaagtgc	8220
tcaaaaattt	cagaaatttc	caatttccaa	acaattttgg	agaactttca	aaaatttttc	8280
caactgaaat	taaagctata	ttctatcact	aaattttata	caagtcttaa	gagaaaatga	8340

tgaagtggct cattttgtag aatttcctaa aaaataatat cttcagggcg atcactgctt	8400
caacatttcc gcaatcaaac cattcctggg atggcaaaaa tattcgaatg tatcagcgac	8460
tctataccgt tcaacttgac atatgccatg gaatcaatca gatgttgatg agaatgcagc	8520
tgttcttgca tataatggac aactatggaa tcaaaagctt ttgcatcaag tcaaattgaa	8580
tgcggtaaag tattataagt gttttgtcca aactatgata cagttcttca gatatggaga	8640
acacttcgtg ccactcgaga tgccgcattt tcagttcgtg aacaagccgg acacactttg	8700
aaattctcgt tggagaatgc tgtagctgtt gatacaagag atagacctat tcttgcaagt	8760
cgtggaattc ttggttaagag taacaacgac tattttttaa aaatatcttt ttcgaaaaaa	8820
ttacgaacga aaaaaaactg tattatgtac ccaaacgcga aattttgcag ttcttgccg	8880
ttcttggtga taaaaaatat gtaaaaaatt ggaaaaacta cgaaaagtcg ataaaaattc	8940
cgtaccaacc ggaaaatgtt tcattaattt ctcttccttt tttcagctcg ttttgc tcaa	9000
gagtacgcag gagtatttgg tgatgcgtca tttgtgaaga atacattaga tttacaggta	9060
acaaccttat ttcaacaatt atttcaaatt ctattaaaaa taattccagg cagctgcccc	9120
tcttccactc ggtttcattc ttgccgcctc attccaagcg aaacatttga aaggactcgg	9180
agatcgagaa gttcatattt tggatagatg ttatttgggt ggacaacagg atgttcgagg	9240
atttggctcg aatactattg gagtgagttt taacgaaatt ctcttgaaag tcaaataatc	9300
attttcaggt taaagcagat aacagttgtc ttggaggagg tgcttcactt gctgggtgctg	9360
ttcatttgta tcggccattg attccaccaa atatgctatt tgcacacgca ttccttgc	9420
ctggaagtgt tgcacagtt cattccaaaa atttgggtgca acaattacag gatactcaac	9480
gagtatcagc cggatttggg gagtttgaaa tttaggaaac atttggatga aatgtatttt	9540
ttaaaaaatag atcagcttta tttatttgaa aaaaaacgct cattaatcaa tagtgatagt	9600
tccattctga gtttcttctt ctctctcgcg gaatacaatt tttgacttgt tcgcatcctt	9660
cttgtgtact ttgtcaccaa tcttctcatc aactaaatct cgaaactgaa aaaatttcaa	9720
aattattcca aaaaatattg atgcagacta cctttttgat ggcttctggg acgtttctag	9780
cgtcgaatgg attggctcct ccaataatta aagtctcggt cggtagttta gccagacgga	9840
cgggtgtgctt caacattttt ctaattaatc tatttcaatt caagtcactc actctctctt	9900
gacgtcttct tctatattcc aagaactctg cagaaaatcc gtgtccgctt tgtgtgtttc	9960
tagttggcgt cggaggattc acgggtccaa gacgaatgga tgtctaaaaa atgttatatt	10020
tttgcataaa gaaaacacca taccttcacc actttttgag ttgtgggcgt tctgaatgga	10080
attgatcgat tattattgct ctttcttgat ttgcttctat cagctgcgta atgagggtgtt	10140
ctaaagatca gctttaattc atttggacaa gtgctcctct aataaactta ccctgtactc	10200

atTTTTgaaa	cgatttacga	tgataagatt	gaaagtggaa	gttaaattta	gtctttcaaa	10260
gttgaaataa	aatcttcata	aataaataaa	tttaaataaa	agattaaata	aattaacggt	10320
cacgtagtta	aaaaaataat	ttaaatctta	acttctaata	aaaaatctca	atTTTccagg	10380
actcgcattc	gtgttcaaaa	gtattttccg	gctggaactc	aactacacgt	atccattgaa	10440
atatgtgctc	ggcgattcat	tgctcgggtg	attccatatt	ggagctgggtg	tcaacttctt	10500
gtagagatta	attggatgca	agcaccctc	aaaaagattt	ttttgaaaaa	cgataaattc	10560
acagaatttc	agttcttttt	ctcccccttt	tattgttatt	ttcatcgtaa	tgctgtgcta	10620
gaagtcagag	taaatatgag	tttttttggt	ttctaggaat	tccatttttt	caggaagcaa	10680
atttaataaa	aattatcgaa	tttcttgctc	taaagatggt	gtacatttta	tggaaatggt	10740
cgtatagtaa	ttcgaacact	ttatatTTct	cgTTTTaaaa	ctgtcgggtg	tttatagtaa	10800
actatcttca	gaaaaaaatg	agcctacgaa	aatcaattt	cgtaactgga	aacgtgaaga	10860
agcttgaaga	agtcaaggct	atTTTgaaga	atttcgagg	aaaatatatt	tgatattatt	10920
cgaacgcgaa	atTTTgcgcc	aaaagtacga	tgcttggtct	caacacgaca	atattttggt	10980
aaatacaaac	gaatgtgcgc	cttcaaagaa	aagtttcaat	ctttcgttgc	cgtggagata	11040
tttttagagt	ttttgtttta	attatatatt	tgctgtatcg	aaaccgggta	ccgtaatcaa	11100
tcaattaaat	atTTTcagg	ttcaaacgtg	gatgtcgatt	tggatgaatt	ccaaggagaa	11160
cccgaattta	ttgccgaaag	aaagtgccgt	gaggctggtg	aagctgtaaa	agggcccggt	11220
ttggtatgga	aaattgtatt	tgttctaaaa	attgtcaaat	ttcaggtcga	agacacaagt	11280
ttatgcttca	acgcaatggg	cggctcttct	ggaccttata	tcaagtgggt	tttgaagaat	11340
ttgaaaccag	aaggactaca	taatatgcta	ggtaaatatt	ttaatttttt	gaaaaaactt	11400
atTTTtcagc	cggattttct	gacaaaaccg	cctatgctca	atgcatcttt	gcgtacactg	11460
aaggactcgg	aaaacctatt	catgtatttg	ctggatgat	tttttgaatt	taattcttta	11520
atTTTtatatg	ttaatttagt	tgtttcattc	ctcaatttat	gagagatttt	tttttcaatt	11580
tttctatttc	aggaaaatgt	cctgggtcaaa	ttgttgctcc	acgtgggtgat	actgcttttg	11640
gatgggatcc	atgcttccag	ccagatgggt	ttaaagaaac	attcggagaa	atggataaag	11700
atgtaaaaaa	tgaaatttct	catcgtgcaa	aggctctgga	actcctcaag	gaatattttc	11760
agaataatta	aattattttt	tctcatctat	gcaatttctt	gaaaatttgt	taagtttccg	11820
ttgttatgca	tttgctttta	tttaaaaaaa	aaagaatatt	tttacattaa	tattagatat	11880
gagaaaagag	taatttctgg	atTTTtaacct	tcctacaaaa	gaatatttat	atTTTttgta	11940
tgatttttta	aaaatatcgt	caggaaataa	taacatttca	gatataccct	gaactctaca	12000

gtttatgata	ttcaggaaat	ttctgaat	tctgaaac	tacaaaatgc	gaacggatcc	12060
gattat	gtgattgggt	gcactggaac	cgggaaaagt	gatcttggag	tggcaattgc	12120
aaagaaat	ggaggagagg	tgattagtgt	agattcaatg	caat	aaggtacatg	12180
gg	caat	tttaattaatt	ttcgt	aggacttgac	attgccacga	12240
ataagataac	ggaagaagaa	tctgaaggga	ttcaacatca	tatgatgtca	tttttgaatc	12300
catctgaatc	atcatcttat	aatgtacata	gtttccgaga	agtcacgttg	gatcttatta	12360
aagtgttaa	ttcgccactt	tttgaacttg	atcctaattt	tcataatttt	cagaaaatcc	12420
gcgcccgttc	aaaaattcct	gtaattgtcg	gaggaaccac	ttattatgct	gaaagtgtcc	12480
tttatgagaa	taatctgatt	gaaaccaaca	cttcagatga	cgtggattcc	aaatcgagaa	12540
catcatcaga	atcgtcatct	gaagacactg	aagaaggaat	tagtaatcaa	gaattatggg	12600
atgaattgaa	aaaaatcgac	gaaaaatcag	cacttcttct	acatccaaat	aatcgttatc	12660
gagtacagag	agcattgcaa	at	aaactggtaa	ttgatttgca	aatttccaga	12720
ttaaaaacaa	atcaagtaaa	gttttttgca	ggaatccgaa	aaagtgaact	tgttgaaaaa	12780
cagaaatcag	atgaaactgt	tgatttgggt	ggacgactac	gatttgataa	ttcttttagtt	12840
at	atgcaacacc	tgaagt	gaagaaagac	ttgatggaag	agttgataaa	12900
atgattaaat	tgggttgaa	gaatgaattg	atcgagtttt	ataacgaggt	aaatatttga	12960
at	aaaaaaaag	aaaatttttt	attattttgt	ttttttttca	ttctttacta	13020
ttttccaaaa	aagt	ttttgaaaac	tgttcagaaa	atgttcgtgt	at	13080
gcttactgag	gcattatttc	attgtgattt	ttactatact	ctataaacta	aattttcagc	13140
acgccgagta	cataaatcac	agcaa	atgtcatgca	atgtattgggt	cttaaagaat	13200
tcgttccatg	gtcaatttg	gacccatcag	aaagagatac	actcaatggg	gataaattgt	13260
tcaagcaagg	gtaatttaaa	tttattttca	at	attccaagct	at	13320
gcgatgatgt	gaagcttcac	actcgacaat	atgcacggcg	ccagagacgg	tggatcgat	13380
cgagactttt	aaaacggtcg	gatggtgatc	gggtatggtg	at	aattgaattt	13440
ttaaagaact	tttttactaa	attaacaaag	ttattggctg	aaaatggctg	aaaattatag	13500
taaaactaat	caaaaaaatt	gaaattttga	attaaagtca	taaagtgacg	accagaaaaat	13560
taaaaaaaaa	cattttttcta	ttttaattaa	ttcactctac	ttcactttaa	aaataatttt	13620
cagaaaaatgg	caagtacaaa	aatgctggat	acatctgaca	agtaccgaat	aattagtgat	13680
ggaatggaca	ttgttgatca	atggatgaat	ggaatcgatc	tatttgaaga	tgtaaaattt	13740
cacaaattct	aaaatttccg	aatcacaaat	taaaatttct	acagatctcc	acagacacca	13800
atccaattct	aaaaggggcc	gatgcaaata	ttctgctgaa	ttgtgaaatc	tgtaatattt	13860

caatgactgg aaaagataat tggtttgttt caatacatat tataatttcg aaatgaattt 13920
 tttcaggcag aaacatatcg atgggaaaaa gcacaagcat catgctaagc aaaagaaatt 13980
 ggcagagact cgcacataag acgctatatt tttttttgt taacttaaat ttttttgg 14040
 gttgattggt ctctaaataa aaaaacagct cagagagaag attaggcgct cgtccacatc 14100
 tccgacgata gtcaacccga acgaaggga ctatctttaa ttgtcagtga tgacgtcatg 14160
 tcgtcaagaa ctcgtcatag ctgtgagaat tgaaccatta tagatttgga cattagttta 14220
 gggtatatcc agtacactaa atggtacatg atagacagtg tacatttaca gatttataga 14280
 ttgtctcagt gactagttac cggaagagga gaggagaaca tgtggcgatg tcttttggat 14340
 cgatattatt ccgtctgaaa attgttcact agggggactg ccgattacca cttcacatga 14400
 cggaacatgt tagttaaaat attggctttt atacacattt tcaaaatagc acctgtat 14458

<210> 2
 <211> 430
 <212> PRT
 <213> C. elegans

<400> 2

Met Ile Phe Arg Lys Phe Leu Asn Phe Leu Lys Pro Tyr Lys Met Arg
 1 5 10 15

Thr Asp Pro Ile Ile Phe Val Ile Gly Cys Thr Gly Thr Gly Lys Ser
 20 25 30

Asp Leu Gly Val Ala Ile Ala Lys Lys Tyr Gly Gly Glu Val Ile Ser
 35 40 45

Val Asp Ser Met Gln Phe Tyr Lys Gly Leu Asp Ile Ala Thr Asn Lys
 50 55 60

Ile Thr Glu Glu Glu Ser Glu Gly Ile Gln His His Met Met Ser Phe
 65 70 75 80

Leu Asn Pro Ser Glu Ser Ser Ser Tyr Asn Val His Ser Phe Arg Glu
 85 90 95

Val Thr Leu Asp Leu Ile Lys Lys Ile Arg Ala Arg Ser Lys Ile Pro
 100 105 110

Val Ile Val Gly Gly Thr Thr Tyr Tyr Ala Glu Ser Val Leu Tyr Glu
 115 120 125

Asn Asn Leu Ile Glu Thr Asn Thr Ser Asp Asp Val Asp Ser Lys Ser
 130 135 140

Arg Thr Ser Ser Glu Ser Ser Ser Glu Asp Thr Glu Glu Gly Ile Ser
 145 150 155 160

Asn Gln Glu Leu Trp Asp Glu Leu Lys Lys Ile Asp Glu Lys Ser Ala
 165 170 175

Leu Leu Leu His Pro Asn Asn Arg Tyr Arg Val Gln Arg Ala Leu Gln
 180 185 190

Ile Phe Arg Glu Thr Gly Ile Arg Lys Ser Glu Leu Val Glu Lys Gln
 195 200 205

Lys Ser Asp Glu Thr Val Asp Leu Gly Gly Arg Leu Arg Phe Asp Asn
 210 215 220

Ser Leu Val Ile Phe Met Asp Ala Thr Pro Glu Val Leu Glu Glu Arg
 225 230 235 240

Leu Asp Gly Arg Val Asp Lys Met Ile Lys Leu Gly Leu Lys Asn Glu
 245 250 255

Leu Ile Glu Phe Tyr Asn Glu His Ala Glu Tyr Ile Asn His Ser Lys
 260 265 270

Tyr Gly Val Met Gln Cys Ile Gly Leu Lys Glu Phe Val Pro Trp Leu
 275 280 285

Asn Leu Asp Pro Ser Glu Arg Asp Thr Leu Asn Gly Asp Lys Leu Phe
 290 295 300

Lys Gln Gly Cys Asp Asp Val Lys Leu His Thr Arg Gln Tyr Ala Arg
 305 310 315 320

Arg Gln Arg Arg Trp Tyr Arg Ser Arg Leu Leu Lys Arg Ser Asp Gly
 325 330 335

Asp Arg Lys Met Ala Ser Thr Lys Met Leu Asp Thr Ser Asp Lys Tyr
 340 345 350

Arg Ile Ile Ser Asp Gly Met Asp Ile Val Asp Gln Trp Met Asn Gly
 355 360 365

Ile Asp Leu Phe Glu Asp Ile Ser Thr Asp Thr Asn Pro Ile Leu Lys

370

375

380

Gly Ser Asp Ala Asn Ile Leu Leu Asn Cys Glu Ile Cys Asn Ile Ser
 385 390 395 400

Met Thr Gly Lys Asp Asn Trp Gln Lys His Ile Asp Gly Lys Lys His
 405 410 415

Lys His His Ala Lys Gln Lys Lys Leu Ala Glu Thr Arg Thr
 420 425 430

<210> 3
 <211> 2041
 <212> DNA
 <213> C. elegans

<400> 3
 ctgccataag atggcgctccg tggcggctgc acgagcagtt cctgtgggca gtgggctcag 60
 gggcctgcaa cggaccctac ctcttgtagt gattctcggg gccacgggca ccggcaaatac 120
 cacgctggcg ttgcagctag gccagcggct cggcgggtgag atcgtcagcg ctgactccat 180
 gcaggtctat gaaggcctag acatcatcac caacaagggt tctgcccagg agcagagaaat 240
 ctgccggcac cacatgatca gctttgtgga tcctcttgtg accaattaca cagtgggtgga 300
 cttcagaaat agagcaactg ctctgattga agatatattt gcccgagaca aaattcctat 360
 tgttgtggga ggaaccaatt attacattga atctctgctc tggaaagtgc ttgtcaatac 420
 caagccccag gagatgggca ctgagaaaagt gattgaccga aaagtggagc ttgaaaagga 480
 ggatgggtctt gtacttcaca aacgcctaag ccaggtggac ccagaaatgg ctgccaagct 540
 gcatccacat gacaaacgca aagtggccag gagcttgcaa gtttttgaag aaacaggaat 600
 ctctcatagt gaatttctcc atcgtaaca tacggaagaa ggtgggtggc cccttggagg 660
 tcctctgaag ttctctaacc cttgcaccc tttggcttcat gctgaccagg cagttctaga 720
 tgagcgcttg gataagaggg tggatgacat gcttgctgct gggctcttgg aggaactaag 780
 agattttcac agacgtata atcagaagaa tgtttcggaa aatagccagg actatcaaca 840
 tggatatctc caatcaattg gcttcaagga atttcacgag tacctgatca ctgagggaaa 900
 atgcacactg gagactagta accagcttct aaagaaagga cctgggtccca ttgtccccc 960
 tgtctatggc ttagaggtat ctgatgtctc gaagtgggag gactctgttc ttgaacctgc 1020
 tcttgaaatc gtgcaaagtt tcatccaggg ccacaagcct acagccactc caataaagat 1080
 gccatacaat gaagctgaga acaagagaag ttatcacctg tgtgacctct gtgatcgaat 1140
 catcattggg gatcgagaat gggcagcgca cataaaatcc aaatcccact tgaaccaact 1200

gaagaaaaga agaagattgg actcagatgc tgtcaacacc atagaaagtc agagtgtttc 1260
 cccagactat aacaaagaac ctaaagggaa gggatcccca gggcagaatg atcaagagct 1320
 gaaatgcagc gtttaagaga catgtccagt ggcctttgga aagggtggtgg ggatccagtt 1380
 caggagggag gggtatgttt gtctcccagt ctgggcaaag gagtgttatg cggaattctc 1440
 tgcatagcag aaaagctccc accattttct tttgatgtgg ttttaaagtc tcacgttctc 1500
 tataatagaa acagcaggtc ttgtcagctc cttgtgtggc tgatgtgtct ggaaatgatg 1560
 tagttcagga aagcattttt tttttctttg aaccttaaag gttctattat taaaagcagc 1620
 acagattcca cattttttata catgaggatc ttctttgtgg tgaataccag gattgactgc 1680
 atccctttta aagaagtttt atgtccctga ctctggctaa aattatctaa tttccagatg 1740
 cttttgtaga tgactgaagt atttgtgagc cacatattgg gagttctaga tttgagtga 1800
 tggcaggaaa gggccatctc cattgagatg attaagtga ccaaactagt tctcggaatt 1860
 ctacagagaa ggagggaatc agactgagga agctgtgaca taggacttga agaccaaaga 1920
 ctttgaaatt tgcgagctgc tcatgtgtga gttattatca ctgctgtctt tctattgagt 1980
 tacaaatcta tattttttatt gaagtttaaa taaagaaaaa atttacaaga aaaaaaaaaa 2040
 a 2041

<210> 4
 <211> 892
 <212> PRT
 <213> C. elegans

<400> 4

Met Phe Arg Lys Leu Gly Ser Ser Gly Ser Leu Trp Lys Pro Lys Asn
 1 5 10 15

Pro His Ser Leu Glu Tyr Leu Lys Tyr Leu Gln Gly Val Leu Thr Lys
 20 25 30

Asn Glu Lys Val Thr Glu Asn Asn Lys Lys Ile Leu Val Glu Ala Leu
 35 40 45

Arg Ala Ile Ala Glu Ile Leu Ile Trp Gly Asp Gln Asn Asp Ala Ser
 50 55 60

Val Phe Asp Phe Phe Leu Glu Arg Gln Met Leu Leu Tyr Phe Leu Lys
 65 70 75 80

Ile Met Glu Gln Gly Asn Thr Pro Leu Asn Val Gln Leu Leu Gln Thr
 85 90 95

Leu Asn Ile Leu Phe Glu Asn Ile Arg His Glu Thr Ser Leu Tyr Phe
 100 105 110

Leu Leu Ser Asn Asn His Val Asn Ser Ile Ile Ser His Lys Phe Asp
 115 120 125

Leu Gln Asn Asp Glu Ile Met Ala Tyr Tyr Ile Ser Phe Leu Lys Thr
 130 135 140

Leu Ser Phe Lys Leu Asn Pro Ala Thr Ile His Phe Phe Phe Asn Glu
 145 150 155 160

Thr Thr Glu Glu Phe Pro Leu Leu Val Glu Val Leu Lys Leu Tyr Asn
 165 170 175

Trp Asn Glu Ser Met Val Arg Ile Ala Val Arg Asn Ile Leu Leu Asn
 180 185 190

Ile Val Arg Val Gln Asp Asp Ser Met Ile Ile Phe Ala Ile Lys His
 195 200 205

Thr Lys Glu Tyr Leu Ser Glu Leu Ile Asp Ser Leu Val Gly Leu Ser
 210 215 220

Leu Glu Met Asp Thr Phe Val Arg Ser Ala Glu Asn Val Leu Ala Asn
 225 230 235 240

Arg Glu Arg Leu Arg Gly Lys Val Asp Asp Leu Ile Asp Leu Ile His
 245 250 255

Tyr Ile Gly Glu Leu Leu Asp Val Glu Ala Val Ala Glu Ser Leu Ser
 260 265 270

Ile Leu Val Thr Thr Arg Tyr Leu Ser Pro Leu Leu Leu Ser Ser Ile
 275 280 285

Ser Pro Arg Arg Asp Asn His Ser Leu Leu Leu Thr Pro Ile Ser Ala
 290 295 300

Leu Phe Phe Phe Ser Glu Phe Leu Leu Ile Val Arg His His Glu Thr
 305 310 315 320

Ile Tyr Thr Phe Leu Ser Ser Phe Leu Phe Asp Thr Gln Asn Thr Leu
 325 330 335

Thr Thr His Trp Ile Arg His Asn Glu Lys Tyr Cys Leu Glu Pro Ile
 340 345 350

Thr Leu Ser Ser Pro Thr Gly Glu Tyr Val Asn Glu Asp His Val Phe
 355 360 365

Phe Asp Phe Leu Leu Glu Ala Phe Asp Ser Ser Gln Ala Asp Asp Ser
 370 375 380

Lys Ala Phe Tyr Gly Leu Met Leu Ile Tyr Ser Met Phe Gln Asn Asn
 385 390 395 400

Ala Asp Val Gly Glu Leu Leu Ser Ala Ala Asn Phe Pro Val Leu Lys
 405 410 415

Glu Ser Thr Thr Thr Ser Leu Ala Gln Gln Asn Leu Ala Arg Leu Arg
 420 425 430

Ile Ala Ser Thr Ser Ser Ile Ser Lys Arg Thr Arg Ala Ile Thr Glu
 435 440 445

Ile Gly Val Glu Ala Thr Glu Glu Asp Glu Ile Phe His Asp Val Pro
 450 455 460

Glu Glu Gln Thr Leu Glu Asp Leu Val Asp Asp Val Leu Val Asp Thr
 465 470 475 480

Glu Asn Ser Ala Ile Ser Asp Pro Glu Pro Lys Asn Val Glu Ser Glu
 485 490 495

Ser Arg Ser Arg Phe Gln Ser Ala Val Asp Glu Leu Pro Pro Pro Ser
 500 505 510

Thr Ser Gly Cys Asp Gly Arg Leu Phe Asp Ala Leu Ser Ser Ile Ile
 515 520 525

Lys Ala Val Gly Thr Asp Asp Asn Arg Ile Arg Pro Ile Thr Leu Glu
 530 535 540

Leu Ala Cys Leu Val Ile Arg Gln Ile Leu Met Thr Val Asp Asp Glu
 545 550 555 560

Lys Val His Thr Ser Leu Thr Lys Leu Cys Phe Glu Val Arg Leu Lys
 565 570 575

Leu Leu Ser Ser Ile Gly Gln Tyr Val Asn Gly Glu Asn Leu Phe Leu

580					585					590					
Glu	Trp	Phe	Glu	Asp	Glu	Tyr	Ala	Glu	Phe	Glu	Val	Asn	His	Val	Asn
	595						600					605			
Phe	Asp	Ile	Ile	Gly	His	Glu	Met	Leu	Leu	Pro	Pro	Ala	Ala	Thr	Pro
610						615					620				
Leu	Ser	Asn	Leu	Leu	Leu	His	Lys	Arg	Leu	Pro	Ser	Gly	Phe	Glu	Glu
625					630					635					640
Arg	Ile	Arg	Thr	Gln	Ile	Val	Phe	Tyr	Leu	His	Ile	Arg	Lys	Leu	Glu
				645					650						655
Arg	Asp	Leu	Thr	Gly	Glu	Gly	Asp	Thr	Glu	Leu	Pro	Val	Arg	Val	Leu
			660					665					670		
Asn	Ser	Asp	Gln	Glu	Pro	Val	Ala	Ile	Gly	Asp	Cys	Ile	Asn	Leu	His
		675					680					685			
Asn	Ser	Asp	Leu	Leu	Ser	Cys	Thr	Val	Val	Pro	Gln	Gln	Leu	Cys	Ser
	690					695					700				
Leu	Gly	Lys	Pro	Gly	Asp	Arg	Leu	Ala	Arg	Phe	Leu	Val	Thr	Asp	Arg
705					710					715					720
Leu	Gln	Leu	Ile	Leu	Val	Glu	Pro	Asp	Ser	Arg	Lys	Ala	Gly	Trp	Ala
				725					730					735	
Ile	Val	Arg	Phe	Val	Gly	Leu	Leu	Gln	Asp	Thr	Thr	Ile	Asn	Gly	Asp
			740					745					750		
Ser	Thr	Asp	Ser	Lys	Val	Leu	His	Val	Val	Val	Glu	Gly	Gln	Pro	Ser
		755					760					765			
Arg	Ile	Lys	Lys	Arg	His	Pro	Val	Leu	Thr	Ala	Lys	Phe	Ile	Phe	Asp
		770				775					780				
Asp	His	Ile	Arg	Cys	Met	Ala	Ala	Lys	Gln	Arg	Leu	Thr	Lys	Gly	Arg
785					790					795					800
Gln	Thr	Ala	Arg	Gly	Leu	Lys	Leu	Gln	Ala	Ile	Cys	Ser	Ala	Leu	Gly
				805					810					815	
Val	Pro	Arg	Ile	Asp	Pro	Ala	Thr	Met	Thr	Ser	Ser	Pro	Arg	Met	Asn
			820					825					830		

Pro Phe Arg Ile Val Lys Gly Cys Ala Pro Gly Ser Val Arg Lys Thr
835 840 845

Val Ser Thr Ser Ser Ser Ser Ser Gln Gly Arg Pro Gly His Tyr Ser
850 855 860

Ala Asn Leu Arg Ser Ala Ser Arg Asn Ala Gly Met Ile Pro Asp Asp
865 870 875 880

Pro Thr Gln Pro Ser Ser Ser Ser Glu Arg Arg Ser
885 890

<210> 5
<211> 355
<212> PRT
<213> C. elegans

<400> 5

Met Ala Glu Lys Ala Glu Asn Leu Pro Ser Ser Ser Ala Glu Ala Ser
1 5 10 15

Glu Glu Pro Ser Pro Gln Thr Gly Pro Asn Val Asn Gln Lys Pro Ser
20 25 30

Ile Leu Val Leu Gly Met Ala Gly Ser Gly Lys Thr Thr Phe Val Gln
35 40 45

Arg Leu Thr Ala Phe Leu His Ala Arg Lys Thr Pro Pro Tyr Val Ile
50 55 60

Asn Leu Asp Pro Ala Val Ser Lys Val Pro Tyr Pro Val Asn Val Asp
65 70 75 80

Ile Arg Asp Thr Val Lys Tyr Lys Glu Val Met Lys Glu Phe Gly Met
85 90 95

Gly Pro Asn Gly Ala Ile Met Thr Cys Leu Asn Leu Met Cys Thr Arg
100 105 110

Phe Asp Lys Val Ile Glu Leu Ile Asn Lys Arg Ser Ser Asp Phe Ser
115 120 125

Val Cys Leu Leu Asp Thr Pro Gly Gln Ile Glu Ala Phe Thr Trp Ser
130 135 140

Ala Ser Gly Ser Ile Ile Thr Asp Ser Leu Ala Ser Ser His Pro Thr
 145 150 155 160

Val Val Met Tyr Ile Val Asp Ser Ala Arg Ala Thr Asn Pro Thr Thr
 165 170 175

Phe Met Ser Asn Met Leu Tyr Ala Cys Ser Ile Leu Tyr Arg Thr Lys
 180 185 190

Leu Pro Phe Ile Val Val Phe Asn Lys Ala Asp Ile Val Lys Pro Thr
 195 200 205

Phe Ala Leu Lys Trp Met Gln Asp Phe Glu Arg Phe Asp Glu Ala Leu
 210 215 220

Glu Asp Ala Arg Ser Ser Tyr Met Asn Asp Leu Ser Arg Ser Leu Ser
 225 230 235 240

Leu Val Leu Asp Glu Phe Tyr Cys Gly Leu Lys Thr Val Cys Val Ser
 245 250 255

Ser Ala Thr Gly Glu Gly Phe Glu Asp Val Met Thr Ala Ile Asp Glu
 260 265 270

Ser Val Glu Ala Tyr Lys Lys Glu Tyr Val Pro Met Tyr Glu Lys Val
 275 280 285

Leu Ala Glu Lys Lys Leu Leu Asp Glu Glu Glu Arg Lys Lys Arg Asp
 290 295 300

Glu Glu Thr Leu Lys Gly Lys Ala Val His Asp Leu Asn Lys Val Ala
 305 310 315 320

Asn Pro Asp Glu Phe Leu Glu Ser Glu Leu Asn Ser Lys Ile Asp Arg
 325 330 335

Ile His Leu Gly Gly Val Asp Glu Glu Asn Glu Glu Asp Ala Glu Leu
 340 345 350

Glu Arg Ser
 355

<210> 6
 <211> 434
 <212> PRT
 <213> C. elegans

<400> 6

Met Ser Glu Lys Thr Phe His Lys Ala Gln Thr Ile Arg Ala Lys Ala
1 5 10 15

Ser Gly Val Pro Ser Ile Val Glu Ala Val Gln Phe His Gly Val Arg
20 25 30

Ile Thr Lys Asn Asp Ala Leu Val Lys Glu Val Ser Glu Leu Tyr Arg
35 40 45

Ser Lys Asn Leu Asp Glu Leu Val His Asn Ser His Leu Ala Ala Arg
50 55 60

His Leu Gln Glu Val Gly Leu Met Asp Asn Ala Val Ala Leu Ile Asp
65 70 75 80

Thr Ser Pro Ser Ser Asn Glu Gly Tyr Val Val Asn Phe Leu Val Arg
85 90 95

Glu Pro Lys Ser Phe Thr Ala Gly Val Lys Ala Gly Val Ser Thr Asn
100 105 110

Gly Asp Ala Asp Val Ser Leu Asn Ala Gly Lys Gln Ser Val Gly Gly
115 120 125

Arg Gly Glu Ala Ile Asn Thr Gln Tyr Thr Tyr Thr Val Lys Gly Asp
130 135 140

His Cys Phe Asn Ile Ser Ala Ile Lys Pro Phe Leu Gly Trp Gln Lys
145 150 155 160

Tyr Ser Asn Val Ser Ala Thr Leu Tyr Arg Ser Leu Ala His Met Pro
165 170 175

Trp Asn Gln Ser Asp Val Asp Glu Asn Ala Ala Val Leu Ala Tyr Asn
180 185 190

Gly Gln Leu Trp Asn Gln Lys Leu Leu His Gln Val Lys Leu Asn Ala
195 200 205

Ile Trp Arg Thr Leu Arg Ala Thr Arg Asp Ala Ala Phe Ser Val Arg
210 215 220

Glu Gln Ala Gly His Thr Leu Lys Phe Ser Leu Glu Asn Ala Val Ala
225 230 235 240

Val Asp Thr Arg Asp Arg Pro Ile Leu Ala Ser Arg Gly Ile Leu Ala
245 250 255

Arg Phe Ala Gln Glu Tyr Ala Gly Val Phe Gly Asp Ala Ser Phe Val
260 265 270

Lys Asn Thr Leu Asp Leu Gln Ala Ala Ala Pro Leu Pro Leu Gly Phe
275 280 285

Ile Leu Ala Ala Ser Phe Gln Ala Lys His Leu Lys Gly Leu Gly Asp
290 295 300

Arg Glu Val His Ile Leu Asp Arg Cys Tyr Leu Gly Gly Gln Gln Asp
305 310 315 320

Val Arg Gly Phe Gly Leu Asn Thr Ile Gly Val Lys Ala Asp Asn Ser
325 330 335

Cys Leu Gly Gly Gly Ala Ser Leu Ala Gly Val Val His Leu Tyr Arg
340 345 350

Pro Leu Ile Pro Pro Asn Met Leu Phe Ala His Ala Phe Leu Ala Ser
355 360 365

Gly Ser Val Ala Ser Val His Ser Lys Asn Leu Val Gln Gln Leu Gln
370 375 380

Asp Thr Gln Arg Val Ser Ala Gly Phe Gly Leu Ala Phe Val Phe Lys
385 390 395 400

Ser Ile Phe Arg Leu Glu Leu Asn Tyr Thr Tyr Pro Leu Lys Tyr Val
405 410 415

Leu Gly Asp Ser Leu Leu Gly Gly Phe His Ile Gly Ala Gly Val Asn
420 425 430

Phe Leu

<210> 7
<211> 198
<212> PRT
<213> C. elegans

<400> 7

Met Leu Tyr Ile Leu Trp Lys Leu Asn Tyr Leu Gln Lys Lys Met Ser

1	5	10	15
Leu Arg Lys Ile Asn Phe Val Thr Gly Asn Val Lys Lys Leu Glu Glu	20	25	30
Val Lys Ala Ile Leu Lys Asn Phe Glu Val Ser Asn Val Asp Val Asp	35	40	45
Leu Asp Glu Phe Gln Gly Glu Pro Glu Phe Ile Ala Glu Arg Lys Cys	50	55	60
Arg Glu Ala Val Glu Ala Val Lys Gly Pro Val Leu Val Glu Asp Thr	65	70	75
Ser Leu Cys Phe Asn Ala Met Gly Gly Leu Pro Gly Pro Tyr Ile Lys	85	90	95
Trp Phe Leu Lys Asn Leu Lys Pro Glu Gly Leu His Asn Met Leu Ala	100	105	110
Gly Phe Ser Asp Lys Thr Ala Tyr Ala Gln Cys Ile Phe Ala Tyr Thr	115	120	125
Glu Gly Leu Gly Lys Pro Ile His Val Phe Ala Gly Lys Cys Pro Gly	130	135	140
Gln Ile Val Ala Pro Arg Gly Asp Thr Ala Phe Gly Trp Asp Pro Cys	145	150	155
Phe Gln Pro Asp Gly Phe Lys Glu Thr Phe Gly Glu Met Asp Lys Asp	165	170	175
Val Lys Asn Glu Ile Ser His Arg Ala Lys Ala Leu Glu Leu Leu Lys	180	185	190
Glu Tyr Phe Gln Asn Asn	195		

<210> 8
 <211> 20
 <212> DNA
 <213> C. elegans

<400> 8
 cgaacacttt atatttctcg

20

<210> 9

<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	9	
	gatagttccc ttcgttcggg	20
<210>	10	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	10	
	tttctggatt ttaaccttcc	20
<210>	11	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	11	
	tttccgagaa gtcacgttgg	20
<210>	12	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	12	
	tacaggaatt tttgaacggg	20
<210>	13	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	13	
	cttcagatga cgtggattcc	20
<210>	14	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	14	
	ggaatccgaa aaagtgaact	20
<210>	15	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	15	
	aagagataca ctcaatgggg	20

<210>	16	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	16	
	atcgatacca ccgtctctgg	20
<210>	17	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	17	
	ttgaatctac actaatcacc	20
<210>	18	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	18	
	ccaattatct tttccagtca	20
<210>	19	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	19	
	acattataaaa gttactgtcc	20
<210>	20	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	20	
	ttttagttaa agcattgacc	20
<210>	21	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	21	
	acatctttat ccatttctcc	20
<210>	22	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	22	

tgcaaaggct ctggaactcc	20
<210> 23	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 23	
aaaaaccact tgatataagg	20
<210> 24	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 24	
catccaaaag cagtatcacc	20
<210> 25	
<211> 21	
<212> DNA	
<213> C. elegans	
<400> 25	
ttaattggat gcaagcacc c	21
<210> 26	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 26	
attactatac gaacatttcc	20
<210> 27	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 27	
ttgtaaaggc gttagtttgg	20
<210> 28	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 28	
caggagtatt tggatgatgcg	20
<210> 29	
<211> 20	
<212> DNA	
<213> C. elegans	

<400> 29	
cgacggggag aaggtgacgg	20
<210> 30	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 30	
aaaacttcta ccaacaatgg	20
<210> 31	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 31	
cgtaatctct ctcgattagc	20
<210> 32	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 32	
ccgtgggatg gctacttgcc	20
<210> 33	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 33	
tggatttgtg gcacgagcgg	20
<210> 34	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 34	
ttgattgcct ctctcgtcc	20
<210> 35	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 35	
atcaacatct gattgattcc	20
<210> 36	
<211> 32	

<212> DNA
 <213> C. elegans

 <400> 36
 cagcgagcgc atgcaactat atattgagca gg 32

 <210> 37
 <211> 41
 <212> DNA
 <213> C. elegans

 <400> 37
 aataaatatt taaatattca gatataccct gaactctaca g 41

 <210> 38
 <211> 45
 <212> DNA
 <213> C. elegans

 <400> 38
 aaactgtaga gttcagggta tatctgaata tttaaattatt tattu 45

 <210> 39
 <211> 34
 <212> DNA
 <213> C. elegans

 <400> 39
 gtacgtggag ctctgcaact atatattgag cagg 34

 <210> 40
 <211> 32
 <212> DNA
 <213> C. elegans

 <400> 40
 atgacactgc aggatagttc ccttcgttcg gg 32

 <210> 41
 <211> 20
 <212> DNA
 <213> C. elegans

 <400> 41
 gtgttgcatc agttcattcc 20

 <210> 42
 <211> 20
 <212> DNA
 <213> C. elegans

 <400> 42
 gctgtgctag aagtcagagg 20

<210>	43	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	43	
	gtttctccttg gaattcatcc	20
<210>	44	
<211>	32	
<212>	DNA	
<213>	C. elegans	
<400>	44	
	agtatatcta gatgtgcgag tctctgccaa tt	32
<210>	45	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	45	
	agtaattgta catttagtgg	20
<210>	46	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	46	
	attaacctta cttacttacc	20
<210>	47	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	47	
	ctaaactaag taatataacc	20
<210>	48	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	48	
	gttgattctt tgagcactgg	20
<210>	49	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	49	
	aattcgacca attacattgg	20

<210>	50	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	50	
	aacatagttg ttgaggaagg	20
<210>	51	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	51	
	aattaatgga gattctacgg	20
<210>	52	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	52	
	tcagcatcta gaaatgcagg	20
<210>	53	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	53	
	cgaatgtcaa cattcactgg	20
<210>	54	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	54	
	cttaacctga tgtgtactcg	20
<210>	55	
<211>	20	
<212>	DNA	
<213>	C. elegans	
<400>	55	
	atgaagcttt agaggatgcc	20
<210>	56	
<211>	20	
<212>	DNA	
<213>	C. elegans	

<400> 56	
cgacgaattt ctggagtcgg	20
<210> 57	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 57	
actgcattat ccattaatcc	20
<210> 58	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 58	
cacccaaata acatctatcc	20
<210> 59	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 59	
tttaacctca tcttcgctgg	20
<210> 60	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 60	
atgttcgcga agcttggttc	20
<210> 61	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 61	
tttaattacc caagtttgag	20
<210> 62	
<211> 20	
<212> DNA	
<213> C. elegans	
<400> 62	
ttttaacca gttactcaag	20
<210> 63	
<211> 441	
<212> PRT	

<213> Homo sapiens

<400> 63

Met Ala Ser Val Ala Ala Ala Arg Ala Val Pro Val Gly Ser Gly Leu
1 5 10 15

Arg Gly Leu Gln Arg Thr Leu Pro Leu Val Val Ile Leu Gly Ala Thr
20 25 30

Gly Thr Gly Lys Ser Thr Leu Ala Leu Gln Leu Gly Gln Arg Leu Gly
35 40 45

Gly Glu Ile Val Ser Ala Asp Ser Met Gln Val Tyr Glu Gly Leu Asp
50 55 60

Ile Ile Thr Asn Lys Val Ser Ala Gln Glu Gln Arg Ile Cys Arg His
65 70 75 80

His Met Ile Ser Phe Val Asp Pro Leu Val Thr Asn Tyr Thr Val Val
85 90 95

Asp Phe Arg Asn Arg Ala Thr Ala Leu Ile Glu Asp Ile Phe Ala Arg
100 105 110

Asp Lys Ile Pro Ile Val Val Gly Gly Thr Asn Tyr Tyr Ile Glu Ser
115 120 125

Leu Leu Trp Lys Val Leu Val Asn Thr Lys Pro Gln Glu Met Gly Thr
130 135 140

Glu Lys Val Ile Asp Arg Lys Val Glu Leu Glu Lys Glu Asp Gly Leu
145 150 155 160

Val Leu His Lys Arg Leu Ser Gln Val Asp Pro Glu Met Ala Ala Lys
165 170 175

Leu His Pro His Asp Lys Arg Lys Val Ala Arg Ser Leu Gln Val Phe
180 185 190

Glu Glu Thr Gly Ile Ser His Ser Glu Phe Leu His Arg Gln His Thr
195 200 205

Glu Glu Gly Gly Gly Pro Leu Gly Gly Pro Leu Lys Phe Ser Asn Pro
210 215 220

Cys Ile Leu Trp Leu His Ala Asp Gln Ala Val Leu Asp Glu Arg Leu

225		230		235		240
Asp Lys Arg Val	Asp Asp Met Leu Ala	Ala Gly Leu Leu Glu Glu Leu				
	245	250			255	
Arg Asp Phe His Arg Arg Tyr Asn Gln Lys Asn Val Ser Glu Asn Ser						
	260	265			270	
Gln Asp Tyr Gln His Gly Ile Phe Gln Ser Ile Gly Phe Lys Glu Phe						
	275	280			285	
His Glu Tyr Leu Ile Thr Glu Gly Lys Cys Thr Leu Glu Thr Ser Asn						
	290	295			300	
Gln Leu Leu Lys Lys Gly Pro Gly Pro Ile Val Pro Pro Val Tyr Gly						
	305	310			315	320
Leu Glu Val Ser Asp Val Ser Lys Trp Glu Glu Ser Val Leu Glu Pro						
	325			330		335
Ala Leu Glu Ile Val Gln Ser Phe Ile Gln Gly His Lys Pro Thr Ala						
	340		345			350
Thr Pro Ile Lys Met Pro Tyr Asn Glu Ala Glu Asn Lys Arg Ser Tyr						
	355		360			365
His Leu Cys Asp Leu Cys Asp Arg Ile Ile Ile Gly Asp Arg Glu Trp						
	370		375			380
Ala Ala His Ile Lys Ser Lys Ser His Leu Asn Gln Leu Lys Lys Arg						
	385		390			395
Arg Arg Leu Asp Ser Asp Ala Val Ala Asn Thr Ile Glu Ser Gln Ser						
	405			410		415
Val Ser Pro Asp Tyr Asn Lys Glu Pro Lys Gly Lys Gly Ser Pro Gly						
	420			425		430
Gln Asn Asp Glu Leu Lys Cys Ser Val						
	435			440		

<210> 64
 <211> 223
 <212> DNA
 <213> C. elegans

 <400> 64

tgattttttac taactctata aactaaattht cagcacgccg agtacataat cacagcaaath 60
 atgggtgtcac gttggtctta aagaattcgt tccatggctc aatttggacc catcagaaaag 120
 agatacactc aatgggggata aattgttcaa gcaagggtaa tttaaattta ttttcaattt 180
 ttataattcc aagctattht cagatgcat gatgtgaagc ttc 223

<210> 65
 <211> 43
 <212> PRT
 <213> C. elegans

<400> 65

His Glu Ala Tyr Ile Asn His Ser Lys Tyr Gly Val Thr Leu Val Leu
 1 5 10 15

Asn Ser Phe His Gly Ile Trp Thr His Gln Lys Trp Ile His Ser Met
 20 25 30

Gly Ile Asn Cys Ser Ser Lys Asp Ala Met Met
 35 40

<210> 66
 <211> 1401
 <212> DNA
 <213> C. elegans

<400> 66

aaaatatcgt caggaaataa taacatttca gatataccct gaactctaca gtttatgata 60
 ttcaggaaat ttctgaattt tctgaaacct tacaaaatgc gaacggatcc gattatthtc 120
 gtgattgggt gcaactggaac cgggaaaagt gatcttggag tggcaattgc aaagaaatat 180
 ggaggagagg tgattagtgt agattcaatg caattttata aaggtagatg ggttttgtht 240
 caatttttaa ttaattaatt ttcgtthttht aggacttgac attgccacga ataagataac 300
 ggaagaagaa tctgaaggga ttcaacatca tatgatgtca tttttgaatc catctgaatc 360
 atcatcttat aatgtacata gtttccgaga agtcacgttg gatcttatta aagtgtthaa 420
 ttcgccactt tttgaacttg atcctaattt tcataattht cagaaaatcc ggcgccgttc 480
 aaaaattcct gtaattgtcg gaggaaccac ttattatgct gaaagtgtcc tttatgagaa 540
 taatctgatt gaaaccaaca cttcagatga cgtggattcc aaatcgagaa catcatcaga 600
 atcgtcatct gaagacactg aagaaggaaat tagtaatcaa gaattatggg atgaattgaa 660
 aaaaatcgac gaaaaatcag cacttcttct acatccaaat aatcgttatc gagtacagag 720
 agcattgcaa atthtccagag aaactggtaa ttgatttgca aatttccaga ttaaaaaaaa 780
 atcaagtaaa gttttttgca ggaatccgaa aaagtgaact tgttgaaaaa cagaaatcag 840

atgaaactgt tgatttgggt ggacgactac gatttgataa ttcttttagtt atttttatgg 900
 atgcaacacc tgaagtttta gaagaaagac ttgatggaag agttgataaa atgattaaat 960
 tgggttttgaa gaatgaaatt gatcgagttt tataacgagg taaatatttg aatttttcca 1020
 gaaaaaaaaa gaaaattttt tattattttg tttttttttc attctttact attttccaaa 1080
 aaagtttaaa cttttgaaaa ctgttcagaa aatgttcgtg tatttatttt agcttactga 1140
 ggcattattt cattgtgatt tttactatac tctataaact aaattttcag cacgccgagt 1200
 acataaatca cagcaaatat ggtgtcatgc aatgtattgg tcttaaagaa ttcgttccat 1260
 ggctcaattt ggacctatca gaaagagata cactcaatgg ggataaattg ttcaagcaag 1320
 ggtaatttaa atttattttc aatttttata aattccaagc tattttcaga tgcgatgatg 1380
 tgaagcttca cactcgacaa t 1401

<210> 67
 <211> 418
 <212> PRT
 <213> *S.cerevisiae*

<400> 67

Met Leu Lys Gly Pro Leu Lys Gly Cys Leu Asn Met Ser Lys Lys Val
 1 5 10 15

Ile Val Ile Ala Gly Thr Thr Gly Val Gly Lys Ser Gln Leu Ser Ile
 20 25 30

Gln Leu Ala Gln Lys Phe Asn Gly Glu Val Ile Asn Ser Asp Ser Met
 35 40 45

Gln Val Tyr Lys Asp Ile Pro Ile Ile Thr Asn Lys His Pro Leu Gln
 50 55 60

Glu Arg Glu Gly Ile Pro His Val Met Asn Asn Val Asp Trp Ser Glu
 65 70 75 80

Glu Tyr Tyr Ser His Arg Phe Glu Thr Glu Cys Met Asn Ala Ile Glu
 85 90 95

Asp Ile His Arg Arg Gly Lys Ile Pro Ile Val Val Gly Gly Thr His
 100 105 110

Tyr Tyr Leu Gln Thr Leu Phe Asn Lys Arg Val Asp Thr Lys Ser Ser
 115 120 125

Glu Arg Lys Leu Thr Arg Lys Gln Leu Asp Ile Leu Glu Ser Asp Pro
 130 135 140

Asp Val Ile Tyr Asn Thr Leu Val Lys Cys Asp Pro Asp Ile Ala Thr
 145 150 155 160

Lys Tyr His Pro Asn Asp Tyr Arg Arg Val Gln Arg Met Leu Glu Ile
 165 170 175

Tyr Tyr Lys Thr Gly Lys Lys Pro Ser Glu Thr Phe Asn Glu Gln Lys
 180 185 190

Ile Thr Leu Lys Phe Asp Leu Phe Leu Trp Leu Tyr Ser Lys Pro Glu
 195 200 205

Pro Leu Phe Gln Arg Leu Asp Asp Arg Val Asp Asp Met Leu Glu Arg
 210 215 220

Gly Ala Leu Gln Glu Ile Lys Gln Leu Tyr Glu Tyr Tyr Ser Gln Asn
 225 230 235 240

Lys Phe Thr Pro Glu Gln Cys Glu Asn Gly Val Trp Gln Val Ile Gly
 245 250 255

Phe Lys Glu Phe Leu Pro Trp Leu Thr Gly Lys Thr Asp Asp Asn Thr
 260 265 270

Lys Leu Glu Asp Cys Ile Glu Arg Met Lys Thr Arg Thr Arg Gln Tyr
 275 280 285

Ala Lys Arg Gln Val Lys Trp Ile Lys Lys Met Leu Ile Pro Asp Ile
 290 295 300

Lys Gly Asp Ile Leu Leu Asp Ala Thr Asp Leu Ser Gln Trp Asp Thr
 305 310 315 320

Asn Ala Ser Gln Arg Ala Ile Ala Ile Ser Asn Asp Phe Ile Ser Asn
 325 330 335

Arg Pro Ile Lys Gln Glu Arg Ala Lys Ala Leu Glu Glu Leu Leu Ser
 340 345 350

Lys Gly Glu Thr Thr Met Lys Lys Leu Asp Asp Trp Thr His Tyr Thr
 355 360 365

Arg Asn Val Cys Arg Asn Ala Asp Gly Lys Asn Val Val Ala Ile Gly

370

375

380

Glu Lys Tyr Trp Lys Ile His Leu Gly Ser Arg Arg His Lys Ser Asn
385 390 395 400

Leu Lys Arg Asn Thr Arg Gln Ala Asp Phe Glu Lys Trp Lys Ile Asn
405 410 415

Lys Lys

<210> 68
<211> 313
<212> PRT
<213> E. coli

<400> 68

Met Ser Asp Ile Ser Lys Ala Ser Leu Pro Lys Ala Ile Phe Leu Met
1 5 10 15

Gly Pro Thr Ala Ser Gly Lys Thr Ala Leu Ala Ile Glu Leu Arg Lys
20 25 30

Ile Leu Pro Val Glu Leu Ile Ser Val Asp Ser Ala Leu Ile Tyr Lys
35 40 45

Gly Met Asp Ile Gly Thr Ala Lys Pro Asn Ala Glu Glu Leu Leu Ala
50 55 60

Ala Pro Arg Leu Leu Asp Ile Arg Asp Pro Ser Gln Ala Tyr Ser Ala
65 70 75 80

Ala Asp Phe Arg Arg Asp Ala Leu Ala Glu Met Ala Asp Ile Thr Ala
85 90 95

Ala Gly Arg Ile Pro Leu Leu Val Gly Gly Thr Met Leu Tyr Phe Lys
100 105 110

Ala Leu Leu Glu Gly Leu Ser Pro Leu Pro Ser Ala Asp Pro Glu Val
115 120 125

Arg Ala Arg Ile Glu Gln Gln Ala Ala Glu Glu Gly Trp Glu Ser Leu
130 135 140

His Arg Gln Leu Gln Glu Val Asp Pro Val Ala Ala Ala Arg Ile His
145 150 155 160

Pro Asn Asp Pro Gln Arg Leu Ser Arg Ala Leu Glu Val Phe Phe Ile
165 170 175

Ser Gly Lys Thr Leu Thr Glu Leu Thr Gln Thr Ser Gly Asp Ala Leu
180 185 190

Pro Tyr Gln Val Gln Phe Ala Ile Ala Pro Ala Ser Arg Glu Leu Leu
195 200 205

His Gln Arg Ile Glu Gln Arg Phe His Gln Met Leu Ala Ser Gly Phe
210 215 220

Glu Ala Glu Val Arg Ala Leu Phe Ala Arg Gly Asp Leu His Thr Asp
225 230 235 240

Leu Pro Ser Ile Arg Cys Val Gly Thr Arg Gln Met Trp Ser Tyr Leu
245 250 255

Glu Gly Glu Ile Ser Tyr Asp Glu Met Val Tyr Arg Gly Val Ala Thr
260 265 270

Arg Gln Leu Ala Lys Arg Gln Ile Thr Trp Leu Arg Gly Trp Glu Gly
275 280 285

Val His Trp Leu Asp Ser Glu Lys Pro Glu Gln Ala Arg Asp Glu Val
290 295 300

Leu Gln Val Val Gly Ala Ile Ala Gly
305 310

<210> 69
<211> 192
<212> PRT
<213> H. sapiens

<220>
<221> misc_feature
<222> (46)..(46)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (82)..(82)
<223> Xaa can be any naturally occurring amino acid

<400> 69

Met Ala Ala Ser Leu Val Gly Lys Lys Ile Val Phe Val Thr Gly Asn
1 5 10 15

Ala Lys Lys Leu Glu Glu Val Val Gln Ile Leu Gly Asp Lys Phe Pro
 20 25 30

Cys Thr Leu Val Ala Gln Lys Ile Asp Leu Pro Glu Tyr Xaa Gly Glu
 35 40 45

Pro Asp Glu Ile Ser Ile Gln Lys Cys Gln Glu Ala Val Arg Gln Val
 50 55 60

Gln Gly Pro Val Leu Val Glu Asp Thr Cys Leu Cys Phe Asn Ala Leu
 65 70 75 80

Gly Xaa Leu Pro Gly Pro Tyr Ile Lys Trp Phe Leu Glu Lys Leu Lys
 85 90 95

Pro Glu Gly Leu His Gln Leu Leu Ala Gly Phe Glu Asp Lys Ser Ala
 100 105 110

Tyr Ala Leu Cys Thr Phe Ala Leu Ser Thr Gly Asp Pro Ser Gln Pro
 115 120 125

Val Arg Leu Phe Arg Gly Thr Ser Gly Arg Ile Val Ala Pro Arg Gly
 130 135 140

Cys Gln Asp Phe Gly Trp Asp Pro Cys Phe Gln Pro Asp Gly Tyr Glu
 145 150 155 160

Gln Thr Tyr Ala Glu Met Pro Lys Ala Glu Lys Asn Ala Val Ser His
 165 170 175

Arg Phe Ala Leu Leu Glu Leu Gln Glu Tyr Phe Gly Ser Leu Ala Ala
 180 185 190

<210> 70
 <211> 196
 <212> PRT
 <213> S.cerevisiae

<400> 70

Met Ser Asn Asn Glu Ile Val Phe Val Thr Gly Asn Ala Asn Lys Leu
 1 5 10 15

Lys Glu Val Gln Ser Ile Leu Thr Gln Glu Val Asp Asn Asn Asn Lys
 20 25 30

Thr Ile His Leu Ile Asn Glu Ala Leu Asp Leu Glu Glu Leu Gln Asp
 35 40 45

Thr Asp Leu Asn Ala Ile Ala Leu Ala Lys Gly Lys Gln Ala Val Ala
 50 55 60

Ala Leu Gly Lys Gly Lys Pro Val Phe Val Glu Asp Thr Ala Leu Arg
 65 70 75 80

Phe Asp Glu Phe Asn Gly Leu Pro Gly Ala Tyr Ile Lys Trp Phe Leu
 85 90 95

Lys Ser Met Gly Leu Glu Lys Ile Val Lys Met Leu Glu Pro Phe Glu
 100 105 110

Asn Lys Asn Ala Glu Ala Val Thr Thr Ile Cys Phe Ala Asp Ser Arg
 115 120 125

Gly Glu Tyr His Phe Phe Gln Gly Ile Thr Arg Gly Lys Ile Val Pro
 130 135 140

Ser Arg Gly Pro Thr Thr Phe Gly Trp Asp Ser Ile Phe Glu Pro Phe
 145 150 155 160

Asp Ser His Gly Leu Thr Tyr Ala Glu Met Ser Lys Asp Ala Lys Asn
 165 170 175

Ala Ile Ser His Arg Gly Ala Phe Ala Gln Phe Lys Glu Tyr Leu Tyr
 180 185 190

Gln Asn Asp Phe
 195

<210> 71
 <211> 198
 <212> PRT
 <213> E.coli

<400> 71

Met Gln Lys Val Val Leu Ala Thr Gly Asn Val Gly Lys Val Arg Glu
 1 5 10 15

Leu Ala Ser Leu Leu Ser Asp Phe Gly Leu Asp Ile Val Ala Gln Thr
 20 25 30

Asp Leu Gly Val Asp Ser Ala Glu Glu Thr Gly Leu Thr Phe Ile Glu
 35 40 45

Asn Ala Ile Leu Lys Ala Arg His Ala Ala Lys Val Thr Ala Leu Pro
 50 55 60

Ala Ile Ala Asp Asp Ser Gly Leu Ala Val Asp Val Leu Gly Gly Ala
 65 70 75 80

Pro Gly Ile Tyr Ser Ala Arg Tyr Ser Gly Glu Asp Ala Thr Asp Gln
 85 90 95

Lys Asn Leu Gln Lys Leu Leu Glu Thr Met Lys Asp Val Pro Asp Asp
 100 105 110

Gln Arg Gln Ala Arg Phe His Cys Val Leu Val Tyr Leu Arg His Ala
 115 120 125

Glu Asp Pro Thr Pro Leu Val Cys His Gly Ser Trp Pro Gly Val Ile
 130 135 140

Thr Arg Glu Pro Ala Gly Thr Gly Gly Phe Gly Tyr Asp Pro Ile Phe
 145 150 155 160

Phe Val Pro Ser Glu Gly Lys Thr Ala Ala Glu Leu Thr Arg Glu Glu
 165 170 175

Lys Ser Ala Ile Glu Ser His Arg Gly Gln Ala Leu Lys Leu Leu Leu
 180 185 190

Asp Ala Leu Arg Asn Gly
 195

<210> 72
 <211> 221
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Drosophila conceptual translation

<400> 72

Pro Ile Thr Cys Lys His Lys Lys Gln Leu Thr Ala Thr Ser Gly Ser
 1 5 10 15

Val Pro Ile Gly Ile His Val Leu Lys Thr Cys Gly Phe Tyr Leu Pro
 20 25 30

Leu Thr Ile His Ser Gln Val Glu Met Ile Arg Lys Val Pro Leu Ile

35	40	45
Val Val Leu Gly Ser Thr Gly Thr Gly Lys Thr Lys Leu Ser Leu Gln		
50	55	60
Leu Ala Glu Arg Phe Gly Gly Glu Ile Ile Ser Ala Asp Ser Met Gln		
65	70	75
Val Tyr Thr His Leu Asp Ile Ala Thr Ala Lys Ala Thr Lys Glu Glu		
85	90	95
Gln Ser Arg Ala Arg His His Leu Leu Asp Val Ala Thr Pro Ala Glu		
100	105	110
Pro Phe Thr Val Thr His Phe Arg Asn Ala Ala Leu Pro Ile Val Glu		
115	120	125
Arg Leu Leu Ala Lys Asp Thr Ser Pro Ile Val Val Gly Gly Thr Asn		
130	135	140
Tyr Tyr Ile Glu Ser Leu Leu Trp Asp Ile Leu Val Asp Ser Asp Val		
145	150	155
Lys Pro Asp Glu Gly Lys His Ser Gly Glu His Leu Lys Asp Ala Glu		
165	170	175
Leu Asn Ala Leu Ser Thr Leu Glu Leu His Gln His Leu Ala Lys Ile		
180	185	190
Asp Ala Gly Ser Ala Asn Arg Ile His Pro Asn Asn Arg Arg Lys Ile		
195	200	205
Ile Arg Ala Ile Glu Val Tyr Gln Ser Thr Gly Gln Thr		
210	215	220

<210> 73
 <211> 4849
 <212> DNA
 <213> C. elegans

<400> 73	
atcgtgttcc aggtgcaact atatattgag caggaggacg agttgtttgt ttcattgctgc	60
ttaaaaataa aaatggaaaa ttgagtcaaa aagttgagat aaaacaaatt aaaacaattt	120
tctgaaaaat aaacaactga aatttgaagt aataaacaac acgcgaaaac gttatttcgg	180
agcatcgttt gagaagtaaa acttttttttc ggcgccacct tgtgcgcagt ttttatcttc	240

tcttttaatt taattttcaa gctaaatctt tctttttaaa ctttgaataa atattttaaat	300
attcagaatg caccaataaa cctggaacaa aatcgataat gttccgcaag cttgggttctt	360
ctgggtcact atggaagccg aaaaatccgc attcttttga atacctcaaa tattttacaag	420
gagtgtcac aaaaaatgag aaagttacgg aaaacaataa gaaaatatta gtagaagcat	480
tacgagctat cgcagaaatt ctcatlttggg gcgatcagaa tgatgcttcg gtttttgagt	540
gagttttttt ccaatgtttt ttttcaaatt tgatgttgaa tttcagtttc ttccttgagc	600
ggcaaatgct tctttatttc ttgaaaatta tggaacaagg aaacacacca ctaaattgtac	660
aattactgca gactttgaac attttatttcg aaaatatttcg acatgaaact tcactttgta	720
agttttttat atggattttc gcttaaaatt gccagttttc agattttcctt ctaagtaaca	780
atcatgtaaa ctogattatt tcccacaaat tcgatttaca aaatgatgag atcatggctt	840
actacattag ttttctgaaa actctttcat ttaaactgaa tccagctaca atccacttct	900
tcttcaatga aacgactgaa gaattttccat tgttggtaga agttttgaag ctttataatt	960
ggaatgaatc aatgggttcga attgctgtta gaaatattct tttaaatatt gtgagagttc	1020
aagatgattc aatgattatt ttcgctatca agcatacaaa agttagtaga aaattatttt	1080
gaaaagggtg atttaagcaa taaatattac aggaatatct atcggagtta atagattctc	1140
tagttggtct ctacttgaa atggacacat ttgtacgac tgctgagaat gtgttagcta	1200
atcgagagag attacgagga aaagtggatg atttaattga tttgattcat tatattggtg	1260
aactattgga tgtggaagct gtcgccgaaa gtttatcaat tttaggtcag ttttactgct	1320
ggaaaatcaa gtttttaatg ttaaattttc agtaacaaca cgatacttaa gccctctatt	1380
actttcaagt atatcaccaa gaagagataa tcatttactt ctactcactc cgattttctgc	1440
gttatttttt ttctctgaat ttttattggt gagttttaac atttaaaatt acatttttct	1500
aattttattt tttttcagat agttcgtcac catgaaacaa tatatacatt tttatcatct	1560
ttctattttg acactcagaa tactttgacg acccattgga tacgtcataa tgagaaatat	1620
tgcttagaac cgattacatt atcatcacca accggagaat atgtgaatga agaccagtaa	1680
gagctgaaat tttaaaattt ttgctttgaa tatagtattt tcagcgtatt tttcgatttt	1740
ctactggaag catttgattc cagtcaagca gacgattcga aggcattcta tggattaatg	1800
ctgatttatt caatgtttca gaataatggt gagttttaaa aaattgattt gttaaattaa	1860
aatttccatt tccaataact cctcttcaga cagtaagttt tcaatgttgt aaagttcctg	1920
ttcatctgtg atcgttttct tcattttttt agttttgcat gaacagtttt caaatttttt	1980
tgatatcata cagtaaatat cgtcatccag ataattttct atttaaaaaa aatgaataaa	2040
aagagggcgc gcagaaattg ccgaagtaat gtaaatttaa agggacacat gcgtagcttg	2100

ttgtgtgggt	ctcgccgcgc	tttgtttgat	ttatcttggt	ttctgctcaa	agagctgttt	2160
ttatttttagc	gttgaatgct	tttttaccgt	tctcatcggc	tttttaatag	gaatatttaa	2220
aaaaaaaggt	ttaataaatc	ttcgttttta	caaaatccat	ctaagatttg	catttgtgaa	2280
gctcaacaag	taaagttaa	gtaacattgt	tttttaaaaa	acaattgaac	caaattttgc	2340
cgaaacatta	ataacatgac	gatactctat	aaaatattcc	tcttttcaaa	ataaattttc	2400
aaaaaaaaatc	catttttcag	ccgatgttgg	agaacttcta	tctgctgcca	acttcccagt	2460
gctcaaagaa	tcaacgacaa	cttcattagc	tcaacagaat	cttgctcgtc	tccgaatagc	2520
atctacgtct	tccatatcaa	agcgaacgag	agctatcact	gaaattggag	tagaagcgac	2580
cgaggaagat	gagatttttc	atgatgttcc	tgaagaacaa	acgttggtta	gtaaataaat	2640
caacattgat	tggtacacaa	actttaatat	ttttaaat	gaaaattttc	ttcaaagtgc	2700
tcaaaaatcc	tgtcgaaaat	tacaggaaga	tctggtggat	gatgtattgg	ttgatactga	2760
aaattcagca	ataagtgatc	cagaagtggag	tagaaaacgt	gcatgtatta	attattaaaa	2820
aaaaaatata	gttttcccca	gttttccttg	acctaaaact	cagcaatttc	agcctaaaaa	2880
cgtggagtca	gaatctcggt	ctcgatttca	atctgctggt	gatgagcttc	cacctccgtc	2940
gacttctgga	tgtgatggtc	gactttttga	tgcactttca	tcgattatca	aagcagttgg	3000
aacagatgac	aatcgaattc	gaccaattac	attggaactt	gcatgtcttg	taattcggca	3060
aattttaatg	actgttgatg	atgaaaaagt	aagattacaa	attcaaaatt	gagcaaaatc	3120
agaatctaaa	tttcataaat	tgttcaggta	cataccagtt	taacgaaatt	atgcttcgaa	3180
gttcgtctaa	aacttttatc	atcaattgga	caatatgtta	atggagagaa	tctgtttttg	3240
gagtggtttg	aggatgaata	tgcagaattt	gaagtaagcc	aagaggccg	aaaataattt	3300
aattcatcct	ttttattcag	gtgaatcacg	tgaatttcga	tataatcggg	cacgaaatgc	3360
ttcttctctc	agctgcaact	cctctttcga	atctgctact	tcataagcga	ttgcccagtg	3420
gatttgaaga	acgaataaga	actgtaggaa	actttttaaa	tttgaaaatt	aattatatat	3480
atatttgcag	caaatcgat	tctacctaca	tattcgaaaa	ttggaacgag	atttgaccgg	3540
tgaaggagac	acagaattac	ctgtgagagt	gttgaattct	gatcaggaac	cagttgccat	3600
cgggtgattgt	attaatttac	gtgagttcat	ctgcatagaa	aacaccatat	ttctactcaa	3660
attaacaatt	ttcagataat	tcggatcttc	tatcctgcac	tgtggttcct	caacaactat	3720
gttctcttgg	aaaacctggg	gatcgtcttg	ctcgattcct	tgtcactgat	agacttcaat	3780
taattcttgt	cgaaccggat	tctcgaaaag	ccggatgggc	aattgttcga	ttcgtaggac	3840
ttcttcaaga	tacaacaatt	aatggagatt	ctacggattc	gaaagttttg	catgttgtgg	3900

tggaagggca accctcgaga attaaggtaa gaatactaac gggaaaaaaaa aatcaaaaaa	3960
ttactttctgt ttcagaaaag acatccggtt ttaactgcaa agttcatatt cgatgatcac	4020
attcgggtgta tggcagcaaa gcaacggctc accaaggtaa cggaaaaaat aaccaaaaag	4080
acggaaagtt attgtaaatg gacgaaatcg gcgaaattaa ttgaaaacgt ttgaatttgc	4140
cgctaaaacc aaacgaaaac caaacgaaag cgaaatttaa ctatcccttc aggtagaata	4200
tacatTTTTat ttctctttat agggtcgcca aacagcacgt ggtctgaaac ttcaggcgat	4260
atgttcagct cttggagttc cacgtatcga tccagcgaca atgacgtcat caccacgaat	4320
gaatccattc agaattgtga aaggatgcgc accgggaagt gtacgaaaaa ctgtttccac	4380
atcatcatcg tcaagccaag gacgtcccgg acattattct gcaaatttta gatcagcatc	4440
tagaaatgca ggaatgatac cagatgatcc aactcaaccg agtagttctt cggaaagaag	4500
atcctagggga tcaatatctc ttcagtttca tcattttatg ctgtaaattg tatttaagta	4560
ttcctattct ttgtagtact gtattttacac atcgtctagt taaaatcaca aatctccgaa	4620
aaaacaaacc agtgaacatg tgatatttct cttgcccata gttctctttt ttttttgaaa	4680
caaaaacaat tactttttatg ctcacctatt cgagccatat ttttttccca attaccgggt	4740
gtttatttta atttcttttt tttttctgta aatctacttt atttttaaaa ctgcatttga	4800
gattgtgtat attttttcaa aatgggtcaa atgccgaatc tatctactt	4849

<210> 74
 <211> 1650
 <212> DNA
 <213> C. elegans

<400> 74	
tttaatcatt attcaaacag aaaaaccgat tatttattca gattctcaaa aatggctgaa	60
aaagctgaaa atcttccatc ttcttcggcc gaagcttcag aagagccatc acctcaaact	120
ggaccaaatg tgaatcaaaa accatcgatt ttgggttcttg gaatggctgg ttctggaaaa	180
acgacatttg ttcaggtaac tttcattcaa ttttgagagt tttcaaacat tactattttc	240
agcgtctcac agcattccta catgctcgta aaacacctcc atatgtgatt aatctggatc	300
cggcagttag caaagtacct tatccagtga atgttgacat tcgagatact gtgaaataca	360
aggaagttat gaaagaattc ggaatgggac caaatggagc aattatgaca tgtcttaacc	420
tgatgtgtac tcgttttgat aaagtaattg agttgattaa taagagatct tctgatttct	480
cagtttgtct tcttgatact cctggacaaa ttgaagcatt cacttgaggt gctagtggat	540
ctattatcac tgattcattg gcaagtagcc atcccacggt aagggatttt gatttatgaa	600
atctgcttga aatgaaaaaa gattctaata aatttttgac ttttaaacat tttttacagt	660

tatatatttgggt ctatatttctta tcatttaaaag caaaatgaaa agtcgatttct actccatatt	720
tattaatttgc gacttttccag gtggtaaatgt acattgtgga ttccgctcgt gccacaaatc	780
caactacatt catgtccaat atgctctacg catgttccat tctctaccgt accaaacttc	840
cattcattgt cgttttcaac aaagctgata ttgtcaaacc aacatttgca ctcaaattgga	900
tgcaagattt cgaaagattt gatgaagctt tagaggatgc cagaagcagt tatatgaatg	960
atttgagtcg ttcattgagt ctcgttcttg atgaattcta ttgcggactg aaaacagggt	1020
tttatttcgaa ataaaacctt ttttaaataa taaatttcag ttgctgcag ttctgcaact	1080
ggagaaggat tcgaagatgt aatgacagca atcgatgaaa gtgttgaagc atacaaaaaa	1140
gaatatgttc caatgtatga aaaagtgttg gctgagaaaa aactattgga tgaggaggag	1200
agaaagaaaa gagatgaaga ggtaattgta gtaatttaat tctgattatc ttcaaatttt	1260
cagactctga aaggaaaagc tgttcacgac ctgaacaaag tcgccaatcc cgacgaattt	1320
ctggagtcgg agttgaattc aaaaatcgat agaattcatt tgggcggagt cgatgaagag	1380
aatgaggagg atgctgaact cgaaagatcc tgattttctt ttgttttttg aatttttatt	1440
ctatatttgat coctgtttac ttcttattgt tctcattttg ttgcgttggt ttacatttta	1500
ctcatttttg cataaacttg ttgcaaaaat caatataatt ttgatctgg aaatgggttt	1560
aaaccttaac ctttcatata ttaataattt tttttcaaaa aaacgttcta aaaagggtcc	1620
tcattttttc aatataggaa attttgaaga	1650

<210> 75
 <211> 3251
 <212> DNA
 <213> C. elegans

<400> 75	
tctttttccaa aaatgagggt cttcgttga aaagccaaca tttaaaacct ttttttttcc	60
agaaacctag tgggttaatgt ctgaaaagac gttccacaag gcacagacca tccgtgcaaa	120
ggcatccgga gtgccttcaa tcgtcgaagc tgtacagttt catggagttc gcatcacaaa	180
aaacgatgct ttgggttaagg aggtactacc caaatttcaa aatgttgac aattcaattg	240
aaaatataaa ttgtgaatta aattcaactt acatgttttt tcagggtttcc gaattataca	300
gaagtaaaaa tctagatgaa cttgttcata actctcatct ggcggtcgt catcttcaag	360
aagttggatt aatggataat gcagttgctc taattgatac atctccaagc tcaaataag	420
gatatgttgt caatttctta gtctcgagaac caaaatcatt cactgctgga gtcaaagcag	480
gagtttcaac gaatggagat gcggatgtca gtttaaattgc cggaaaacaa agtggttgag	540
gacgaggaga ggcaatcaat acacagtata catatactgt aaaggtaagg acgagagttg	600

gcactgccag tttggcatgt tctcccaata ttttttaatt ataaaatttg gaagtataaa	660
aaaatgtttg cttcatctaa aaatagcctt tttcacatga aaaaaattga aaaaaagtgc	720
tcaaaaattt cagaaatttc caatttccaa acaatttttg agaactttca aaaatttttc	780
caactgaaat taaagctata ttctatcact aaattttata caagtcttaa gagaaaatga	840
tgaagtggct cattttgtag aatttcctaa aaaataatat cttcagggcg atcactgctt	900
caacatttcc gcaatcaaac cattcctggg atggcaaaaa tattcgaatg tatcagcgac	960
tctataccgt tcaactgcac atatgccatg gaatcaatca gatgttgatg agaatgcagc	1020
tgttcttgca tataatggac aactatggaa tcaaaagctt ttgcatcaag tcaaattgaa	1080
tgcggtaaag tattataagt gttttgtcca aactatgata cagttcttca gatatggaga	1140
acacttcgtg ccactcgaga tgccgcattt tcagttcgtg aacaagccgg acacactttg	1200
aaattctcgt tggagaatgc tgtagctgtt gatacaagag atagacctat tcttgcaagt	1260
cgtggaattc ttggtaaag taacaacgac tattttttaa aaatatcttt ttcgaaaaaa	1320
ttacgaacga aaaaaaactg tattatgtac ccaaacgcga aattttgcag ttcttgccg	1380
ttcttgttga taaaaaatat gtaaaaaatt ggaaaaacta cgaaaagtcg ataaaaattc	1440
cgtaccaacc ggaaaatggt tcattaattt ctcttccttt tttcagctcg ttttgetcaa	1500
gagtacgcag gagtatttgg tgatgcgtca tttgtgaaga atacattaga ttacaggta	1560
acaaccttat ttcaacaatt atttcaaatt ctattaaaaa taattccagg cagctgcccc	1620
tcttccactc ggtttcattc ttgccgcctc attccaagcg aaacatttga aaggactcgg	1680
agatcgagaa gtccatattt tggatagatg ttatttgggt ggacaacagg atgttcgagg	1740
atttggctcg aatactattg gagtgagttt taacgaaatt ctcttgaaag tcaaataatc	1800
attttcaggt taaagcagat aacagttgtc ttggaggagg tgcttcactt gctgggtgtcg	1860
ttcatttgta tcggccattg attccaccaa atatgctatt tgcacacgca ttcttgcat	1920
ctggaagtgt tgcacagtt cattccaaaa atttggtgca acaattacag gatactcaac	1980
gagtatcagc cggatttgggt gagtttgaaa tttaggaaac atttggatga aatgtatttt	2040
ttaaaaatag atcagcttta tttatttgaa aaaaaacgct cattaatcaa tagtgatagt	2100
tccattctga gtttcttctt ctccctcgcg gaatacaatt tttgacttgt tcgcatcctt	2160
cttgtgtact ttgtcaccaa tcttctcatc aactaaatct cgaaactgaa aaaatttcaa	2220
aattattcca aaaaatattg atgcagacta cttttttgat ggcttctgggt acgtttctag	2280
cgtcgaatgg attggctcct ccaataatta aagtctcgtt cggtagttta gccagacgga	2340
cgggtgtgctt caacattttt ctaattaatc tatttcaatt caagtcactc actctctctt	2400
gacgtcttct tctatatctc aagaactctg cagaaaatcc gtgtccgcct tgtgtgtttc	2460

tagttggcgt	cggaggattc	acgggtccaa	gacgaatgga	tgtctaaaaa	atgttatatt	2520
tttgcataaa	gaaaacacca	taccttcacc	actttttgag	ttgtgggcgt	tctgaatgga	2580
attgatcgat	tattattgct	ctttcttgat	ttgcttctat	cagctgcgta	atgagggtgt	2640
ctaaagatca	gctttaattc	at ttggacaa	gtgctcctct	aataaaactta	ccctgtactc	2700
at ttttgaaa	cgattttacga	tgataagatt	gaaagtggaa	gttaaattta	gtctttcaaa	2760
gttgaaataa	aatcttcata	aataaataaa	tttaaatgaa	agattaaata	aattaacggt	2820
cacgtagtta	aaaaaataat	ttaaatctta	aacttcta	aaaaaatctc	aattttccag	2880
gactcgcatt	cgtgttcaaa	agtattttcc	ggctggaact	caactacacg	tatccattga	2940
aatatgtgct	cggcgattca	ttgctcgggtg	gattccatat	tggagctggg	gtcaacttct	3000
tgtagagatt	aattggatgc	aagcaccct	caaaaagatt	tttttgaaaa	acgataaatt	3060
cacagaattt	cagttctttt	tctccccctt	ttattgttat	tttcacgta	atgctgtgct	3120
agaagtcaga	gtaaatatga	gtttttttgt	gttctaggaa	ttccattttt	tcaggaagca	3180
aatttaataa	aaattatcga	at tttcttgc	ctaaagatgt	tgtacatttt	atggaaatgt	3240
tcgtatagta	a					3251

<210> 76
 <211> 1200
 <212> DNA
 <213> C. elegans

<400> 76	
ttcgaacact	ttatatattct
cgtttttaaa	ctgtcgggtgt
tttatagtaa	actatcttca
60	
gaaaaaaatg	agcctacgaa
aaatcaattt	cgtaactgga
aacgtgaaga	agcttgaaga
120	
agtcaaggct	at ttttgaaga
at ttcgaggt	aaaatatatt
tgatattatt	cgaacgcgaa
180	
at ttttgcgcc	aaaagtacga
tgccctgggtct	caacacgaca
at at ttttgtt	aaatacaaac
240	
gaatgtgccc	cttcaaagaa
aagtttcaat	ctttcgttgc
cgtggagata	tttttagagt
300	
ttttgtttta	attatatatt
tgtcgtatcg	aaaccgggta
ccgtaatcaa	tcaattaaat
360	
at ttttcaggt	ttcaaacgtg
gatgtcgatt	tggatgaatt
ccaaggagaa	cccgaattta
420	
ttgccgaaag	aaagtgccgt
gaggctgttg	aagctgtaaa
agggcccgtt	ttggtatgga
480	
aaattgtatt	tgttctaaaa
attgtcaa	ttcagggtcga
agacacaagt	ttatgcttca
540	
acgcaatggg	cggctcttct
ggaccttata	tcaagtgggt
tttgaagaat	ttgaaaccag
600	
aaggactaca	taatattgct
ggtaaatatt	ttaatttttt
gaaaaaactt	at tttttcagc
660	
cggat ttttct	gacaaaaccg
cctatgctca	atgcattctt
gcgtacactg	aaggactcgg
720	
aaaacctatt	catgtatttg
ctgggtatgat	tttttgaatt
taattcttta	at ttttatatg
780	

ttaatttagt tgtttcattc ctcaatttat gagagatttt tttttcaatt tttctatttc 840
 aggaaaatgt cctgggtcaaa ttgttgctcc acgtgggtgat actgcttttg gatgggatcc 900
 atgcttccag ccagatgggtt ttaaagaaac attcggagaa atggataaag atgtaaaaaa 960
 tgaaatttct catcgtgcaa aggctctgga actcctcaag gaatattttc agaataatta 1020
 aattattttt tctcatctat gcaatttctt gaaaatttgt taagtttccg ttgttatgca 1080
 tttgctttta tttaaaaaaa aaagaatatt tttacattaa tattagatat gagaaaagag 1140
 taatttctgg attttaacct tcctacaaaa gaatatttat attttttgta tgatttttta 1200

<210> 77
 <211> 184
 <212> PRT
 <213> C. elegans

<400> 77

Met Ser Leu Arg Lys Ile Asn Phe Val Thr Gly Asn Val Lys Lys Leu
 1 5 10 15

Glu Glu Val Lys Ala Ile Leu Lys Asn Phe Glu Val Ser Asn Val Asp
 20 25 30

Val Asp Leu Asp Glu Phe Gln Gly Glu Pro Glu Phe Ile Ala Glu Arg
 35 40 45

Lys Cys Arg Glu Ala Val Glu Ala Val Lys Gly Pro Val Leu Val Glu
 50 55 60

Asp Thr Ser Leu Cys Phe Asn Ala Met Gly Gly Leu Pro Gly Pro Tyr
 65 70 75 80

Ile Lys Trp Phe Leu Lys Asn Leu Lys Pro Glu Gly Leu His Asn Met
 85 90 95

Leu Ala Gly Phe Ser Asp Lys Thr Ala Tyr Ala Gln Cys Ile Phe Ala
 100 105 110

Tyr Thr Glu Gly Leu Gly Lys Pro Ile His Val Phe Ala Gly Lys Cys
 115 120 125

Pro Gly Gln Ile Val Ala Pro Arg Gly Asp Thr Ala Phe Gly Trp Asp
 130 135 140

Pro Cys Phe Gln Pro Asp Gly Phe Lys Glu Thr Phe Gly Glu Met Asp
 145 150 155 160

Lys Asp Val Lys Asn Glu Ile Ser His Arg Ala Lys Ala Leu Glu Leu
165 170 175

Leu Lys Glu Tyr Phe Gln Asn Asn
180